What is claimed is:

1. A pharmaceutical composition comprising;

(a) 5-60% by weight on a dry weight basis of a DPP-IV inhibitor in free form or in acid addition salt form;

(b) 40-95% by weight on a dry weight basis of a pharmaceutically acceptable diluent;

(c) 0-20% by weight on a dry weight basis of a pharmaceutically acceptable disintegrant; and optionally

(d) 0.1-10% by weight on a dry weight basis of a pharmaceutically acceptable lubricant.

2. A composition according to claim 1 comprising;

(a) 20-40% preferably 20-35% by weight on a dry weight basis of a DPP-IV inhibitor in free form or in acid addition salt form;

(b) 40-95% by weight on a dry weight basis of a pharmaceutically acceptable diluent;

(c) 0-10% by weight on a dry weight basis of a pharmaceutically acceptable disintegrant; and optionally

(d) 0.25-6% by weight on a dry weight basis of a pharmaceutically acceptable lubricant.

3. A composition according to claim 1 or claim 2, comprising;

(a) 20-35% by weight on a dry weight basis of a DPP-IV inhibitor in free form or in acid addition salt form;

(b) 62-78% by weight on a dry weight basis of a pharmaceutically acceptable diluent;

(c) 0-10% by weight on a dry weight basis of a pharmaceutically acceptable disintegrant; and optionally

(d) 0.1-10% by weight on a dry weight basis of a pharmaceutically acceptable lubricant.

4. A composition according to any one of claims 1 to 3 comprising;

(a) 22-28% by weight on a dry weight basis of a DPP-IV inhibitor in free form or in acid addition salt form.

5. A composition according to any one of claims 1 to 2 comprising;

(a) 30-35 % by weight on a dry weight basis of a DPP-IV inhibitor in free form or in acid addition salt form, and

(b) 58-72% by weight on a dry weight basis of a pharmaceutically acceptable diluent;

6. A composition according to any one of claims 1 to 5 comprising;

i) one or two diluents selected from microcrystalline cellulose and lactose

ii) the two diluents microcrystalline cellulose and lactose,

iii) 25-70% preferably 35-55% by weight on a dry weight basis of a pharmaceutically acceptable microcrystalline cellulose, or

iv) 25-70% preferably 35-55% by weight on a dry weight basis of a pharmaceutically acceptable microcrystalline cellulose and 5-40% preferably 18-35% by weight on a dry weight basis of lactose.

7. A composition according to any one of claims 1 to 6 comprising;

(c) 1-6% by weight on a dry weight basis of a pharmaceutically acceptable disintegrant, and/or (d) 0.1-10% by weight on a dry weight basis of a pharmaceutically acceptable lubricant.;

8. A composition according to any one of claims 1 to 5 comprising;

(a) 20-35% by weight on a dry weight basis of DPP-IV inhibitor;

(b) 25-70% by weight on a dry weight basis of a pharmaceutically acceptable microcrystalline cellulose;

(c) 5-40% by weight on a dry weight basis of a pharmaceutically acceptable lactose;

(d) 0-10% by weight on a dry weight basis of a pharmaceutically acceptable sodium starch glycolate;

(e) 0.25-6% by weight on a dry weight basis of magnesium stearate.

9. A composition according to any one of claims 1 to 5 comprising;

(a) 25-35% by weight on a dry weight basis of a DPP-IV inhibitor in free form or in acid addition salt form;

(b) 25-70% by weight on a dry weight basis of a pharmaceutically acceptable microcrystalline cellulose;

(c) 5-40% by weight on a dry weight basis of a pharmaceutically acceptable lactose;

(d) 0-10% by weight on a dry weight basis of a pharmaceutically acceptable sodium starch glycolate;

(e) 0.25-6% by weight on a dry weight basis of magnesium stearate.

10. A composition according to any one of claims 1 to 5 comprising;

(a) 30-35% preferably 30-32% by weight on a dry weight basis of DPP-IV inhibitor e.g. LAF237;

(b) 35-50% preferably 40-45% by weight on a dry weight basis of a pharmaceutically acceptable microcrystalline cellulose;

(c) 18-35% preferably 20-25% by weight on a dry weight basis of a pharmaceutically acceptable lactose;

(d) 1-4% preferably 1.5-2.5% by weight on a dry weight basis of a pharmaceutically acceptable sodium starch glycolate; and

(e) 0.5-4% preferably 0.1-2% by weight on a dry weight basis of magnesium stearate.

11. A composition according to any one of claims 1 to 5 comprising;

(a) 20-35% preferably 22-28% by weight on a dry weight basis of DPP-IV inhibitor e.g. LAF237;

(b) 35-55% by weight on a dry weight basis of a pharmaceutically acceptable microcrystalline cellulose;

(c) 18-35% by weight on a dry weight basis of a pharmaceutically acceptable lactose;

(d) 1-4% by weight on a dry weight basis of a pharmaceutically acceptable sodium starch glycolate; and

(e) 0.5-4% by weight on a dry weight basis of magnesium stearate.

12. A composition according to any one of claims 1 to 5 comprising;

(a) from about 22% to about 28% by weight on a dry weight basis of a DPP-IV inhibitor or a DPP-IV inhibitor of formula (I);

(b) from about 45% to about 50% by weight on a dry weight basis of a pharmaceutically acceptable microcrystalline cellulose;

(c) from about 20% to about 25% by weight on a dry weight basis of a pharmaceutically acceptable lactose;

(d) from about 1.5% to about 2.5% by weight on a dry weight basis of a pharmaceutically acceptable sodium starch glycolate; and

(e) from about 0.1% to about 2% by weight on a dry weight basis of magnesium stearate.

13. A composition according to any one of claims 1 to 12, wherein the DPP-IV inhibitor is selected from 1-{2-[(5-cyanopyridin-2-yl) amino] ethylamino} acetyl-2 (S)- cyano-pyrrolidine dihydrochloride, (S)-1-[(3-hydroxy-1-adamantyl)amino]acetyl-2-cyano-pyrrolidine, L-threo-isoleucyl thiazolidine, MK-0431, GSK23A, BMS-477118, 3-(aminomethyl)-2-isobuthyl-1-oxo-4-phenyl-1,2-dihydro-6-isoquinolinecarboxamide and 2-{[3-(aminomethyl)-2-isobuthyl-4-phenyl-1-oxo-1,2-dihydro-6-isoquinolyl]oxy}acetamide and optionally in any case pharmaceutical salts thereof.

14. A composition according to any one of claims 1 to 12, wherein the DPP-IV inhibitor is 1-[3-hydroxy-adamant-1-ylamino)-acetyl]-pyrrolidine-2(*S*)-carbonitrile or a pharmaceutical salt thereof.

15. A compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet, wherein the dispersion contains particles comprising a DPP-IV inhibitor, in free form or in acid addition salt form, and wherein at least 60% of the particle size distribution in the tablet is less than 250 μm.

16. A compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet wherein the dispersion contains particles comprising DPP-IV inhibitor, in free form or in acid

addition salt form, and wherein tablet thickness to tablet weight ratios is of 0.002 to 0.06 mm/mg preferably of 0.01 to 0.03 mm/mg.

17. A compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet wherein the dispersion contains particles comprising DPP-IV inhibitor, in free form or in acid addition salt form, and wherein;

i) at least 60% of the particle size distribution in the tablet is less than 250 μm preferably between 10 to 250 μm, and

ii) tablet thickness to tablet weight ratios is of 0.002 to 0.06 mm/mg or of 0.01 to 0.03 mm/mg

18. A compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet wherein the dispersion contains particles comprising DPP-IV inhibitor preferably LAF237, in free form or in acid addition salt form, and wherein;

i) at least 60% of the particle size distribution in the tablet is less than 250 μm preferably between 10 to 250 μm,

ii) the water content of the tablet is less than 10% after 1 week at 25°C and 60% RH, and

iii) tablet thickness to tablet weight ratios is of 0.002 to 0.06 mm/mg.

19. A compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet according to any one of claims 15 to 18, wherein the particle size distribution in the tablet is between 50 to 150 μm.

20. A compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet according to any one of claims 15 to 19, wherein the water content of the tablet is less than 5% after 1 week at 25°C and 60% RH

21. A compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet according to any one of claims 15 to 20, wherein tablet thickness to tablet weight ratios is of 0.01 to 0.03 mm/mg

22. A compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet according to any one of claims 15 to 21, wherein at least 60% or at least 80% of the particle size distribution in the tablet is between 10 to 250 μm.

23. A compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet according to any one of claims 15 to 21, wherein at least 25% or at least 35% of the particle size distribution in the tablet is between 50 to 150 μm.

24. A compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet according to any one of claims 15 to 23 wherein the tablet comprises a composition according to any one of claims 1 to 14.

25. A compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet according to any one of claims 15 to 24, wherein

i) between 0 and 10 minutes 85 to 99.5 % of the active ingredient is released, and

ii) between 10 and 15 minutes 90 to 99.5 % of the active ingredient is released.

26. A compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet according to any one of claims 15 to 24, wherein the particle size distribution of the pharmaceutical excipients in the tablet is between 5 and 400μm.

27. The compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet according to any one of claims 15 to 26, in which the DPP-IV inhibitor is selected from 1-{2-[(5-cyanopyridin-2-yl) amino] ethylamino} acetyl-2 (S)- cyano-pyrrolidine dihydrochloride, (S)-1-[(3-hydroxy-1-adamantyl)amino]acetyl-2-cyano-pyrrolidine, L-threo-isoleucyl thiazolidine, MK-0431, GSK23A, BMS-477118, 3-(aminomethyl)-2-isobuthyl-1-oxo-4-phenyl-1,2-dihydro-6-isoquinolinecarboxamide and 2-{[3-(aminomethyl)-2-isobuthyl-4-phenyl-1-oxo-1,2-dihydro-6-isoquinolyl]oxy}acetamide and optionally in any case pharmaceutical salts thereof.

28. The compressed pharmaceutical tablet or a direct compressed pharmaceutical tablet according to any one of claims 15 to 26, in which the DPP-IV inhibitor is *N*-(substituted glycyl)-2-cyanopyrrolidine is 1-[3-hydroxy-adamant-1-ylamino)-acetyl]-pyrrolidine-2(*S*)-carbonitrile or a pharmaceutical salts thereof.

29. A compressed pharmaceutical tablet according to any one of claims 15 to 28, which is a direct compressed tablet.

30. A solid dosage form of the composition according to any one of Claims 1 to 14.

31. The solid dosage form of Claim 30 which is a tablet.

32. The solid dosage form of Claim 30 which is a capsule.

33. A solid dosage form of the composition according to any one of Claims 1 to 14 which is a compressed tablet preferably a direct compressed tablet.

34. Process for preparing a direct compressed tablet according to any one of claims 15 to 29, in unit dosage form, which comprises:

(a) blending as a % by weight on a dry weight basis:

(i) 6-60% by weight on a dry weight basis of DPP-IV inhibitor e.g. LAF237; and
(ii) and at least one excipient selected from a diluent, a disintegrant and a lubricant,

to form a DPP-IV inhibitor formulation in the form of a tableting powder, capable of being directly compressed into a tablet; and

(b) compressing the formulation prepared during step (a) to form the compressed DPP-IV inhibitor tablet in unit dosage form.

35. Process for preparing a direct compressed tablet according to any one of claims 15 to 29, in unit dosage form, which comprises:

(a) blending as a % by weight on a dry weight basis:

(i) 25-35% by weight on a dry weight basis of DPP-IV inhibitor e.g. LAF237;
(ii) 40-95% by weight on a dry weight basis of a pharmaceutically acceptable diluent;

(iii) 0-10% by weight on a dry weight basis of a pharmaceutically acceptable disintegrant; and

(iv) 0.25-6% by weight on a dry weight basis of a pharmaceutically acceptable lubricant,

to form a DPP-IV inhibitor formulation in the form of a tableting powder, capable of being directly compressed into a tablet; and

(b) compressing the formulation prepared during step (a) to form the compressed DPP-IV inhibitor tablet in unit dosage form.

36. Process according to claim 35 wherein the blended formulation comprises:

(i) 20-35% or preferably 25-30% by weight by weight on a dry weight basis of DPP-IV inhibitor preferably LAF237, in free form or in acid addition salt form;
(ii) 25-70% by weight or preferably 35-50% by weight on a dry weight basis of a pharmaceutically acceptable microcrystalline cellulose such as Avicel PH 102;

(iii) 5-40% by weight or preferably 18-35% by weight on a dry weight basis of a pharmaceutically acceptable lactose;

(iv) 0-10% by weight or preferably 1-4% by weight on a dry weight basis of a pharmaceutically acceptable sodium starch glycolate; and

(v) 0.25- 6% by weight or preferably 0.5-4% by weight on a dry weight basis of a pharmaceutically acceptable magnesium stearate.

37. Process according to claim 34, wherein the blended composition used in step (a) is selected from the compositions of claims 1 to 14.

38. The process according to any one of claims 34 to 37, in which the DPP-IV inhibitor is selected from 1-{2-[(5-cyanopyridin-2-yl) amino] ethylamino} acetyl-2 (S)- cyano-pyrrolidine dihydrochloride, (S)-1-[(3-hydroxy-1-adamantyl)amino]acetyl-2-cyano-pyrrolidine, L-threo-isoleucyl thiazolidine, MK-0431, GSK23A, BMS-477118, 3-(aminomethyl)-2-isobuthyl-1-oxo-4-phenyl-1,2-dihydro-6-isoquinolinecarboxamide and 2-{[3-(aminomethyl)-2-isobuthyl-4-phenyl-1-oxo-1,2-dihydro-6-isoquinolyl]oxy}acetamide and optionally in any case pharmaceutical salts thereof.

39. The process according to any one of claims 34 to 37, in which the which the DPP-IV inhibitor is 1-[3-hydroxy-adamant-1-ylamino)-acetyl]-pyrrolidine-2(*S*)-carbonitrile or pharmaceutical salts thereof.

40. A pharmaceutical composition comprising;

(a) a DPP-IV inhibitor in free form or in acid addition salt form,

(b) a pharmaceutically acceptable diluent,

wherein in the unit dosage form, the weight of DPP-IV inhibitor on a dry weight basis to tablet weight of diluent ratio is of 0.5 to 0.25, preferably 0.4 to 0.28.

41. A composition according to claim 40 wherein the diluent is selected from a microcrystalline cellulose and lactose.

42. A composition according to claim 40 or claim 41, wherein at least one diluent is a microcrystalline cellulose and wherein in the unit dosage form, the weight of DPP-IV inhibitor on a dry weight basis to tablet weight of microcrystalline cellulose ratio is of 2 to 0.333, preferably 1 to 0.333, most preferably of 0.7 to 0.333.

43. A composition according to claim 42 or claim 40 comprising lactose as diluent in addition to a microcrystalline cellulose.

44. Composition according to any of claims 40 to 43 wherein the DPP-IV inhibitor is selected from 1-{2-[(5-cyanopyridin-2-yl) amino] ethylamino} acetyl-2 (S)- cyano-pyrrolidine dihydrochloride, (S)-1-[(3-hydroxy-1-adamantyl)amino]acetyl-2-cyano-pyrrolidine, L-threo-isoleucyl thiazolidine, MK-0431, GSK23A, BMS-477118, 3-(aminomethyl)-2-isobuthyl-1-oxo-4-phenyl-1,2-dihydro-6-isoquinolinecarboxamide and 2-{[3-(aminomethyl)-2-isobuthyl-4-phenyl-1-oxo-1,2-dihydro-6-isoquinolyl]oxy}acetamide and optionally in any case pharmaceutical salts thereof.

45. Composition according to any of claims 40 to 43 wherein the DPP-IV inhibitor is 1-[3-hydroxy-adamant-1-ylamino)-acetyl]-pyrrolidine-2(*S*)-carbonitrile or pharmaceutical salts thereof.

46. Composition according to any of claims 1 to 33 or 40 to 45, comprising between 20 and 120 mg preferably between 25 and 100 mg of 1-[3-hydroxy-adamant-1-ylamino)-acetyl]-pyrrolidine-2(*S*)-carbonitrile or a pharmaceutically acceptable acid addition salt thereof.

47. Composition according to any of claims 40 to 46, which further comprises;
(c) 0-20% by weight on a dry weight basis of a pharmaceutically acceptable disintegrant;
(d) 0.1-10% by weight on a dry weight basis of a pharmaceutically acceptable lubricant.

48. Composition according to any of claims 40 to 47, which further comprises;
(c) 1-6% by weight on a dry weight basis of a pharmaceutically acceptable disintegrant;
(d) 0.25-6% by weight on a dry weight basis of a pharmaceutically acceptable lubricant.

49. Composition according to any of claims 40 to 48, which further comprises;
(c) 1-4% by weight on a dry weight basis of a pharmaceutically acceptable sodium starch glycolate; and
(d) 0.5-4% by weight on a dry weight basis of magnesium stearate.

50. A compressed pharmaceutical tablet according to any one of claims 15 to 29 comprising a composition of claims 40 to 49.

52. The Composition according to any of claims 40 to 48 which is a tablet.

53. The composition according to any of claims 40 to 48 which is a capsule.

54. A compressed pharmaceutical tablet, preferably a direct compressed tablet, comprising a DPP-IV inhibitor, in free form or in acid addition salt form.

55. A compressed pharmaceutical tablet according to claim 54, wherein the DPP-IV inhibitor is selected from 1-{2-[(5-cyanopyridin-2-yl) amino] ethylamino} acetyl-2 (S)- cyano-pyrrolidine dihydrochloride, (S)-1-[(3-hydroxy-1-adamantyl)amino]acetyl-2-cyano-pyrrolidine, L-threo-isoleucyl thiazolidine, MK-0431, GSK23A, BMS-477118, 3-(aminomethyl)-2-isobuthyl-1-oxo-4-phenyl-1,2-dihydro-6-isoquinolinecarboxamide and 2-{[3-(aminomethyl)-2-isobuthyl-4-phenyl-1-oxo-1,2-dihydro-6-isoquinolyl]oxy}acetamide and optionally in any case pharmaceutical salts thereof.